THE FARMER & GARDENER;

AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY I. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT $5 PER ANNUM, IN ADVANCE.

No. 20. BALTIMORE, SEPTEMBER 16, 1834. Vol. I.

☞ This publication is the *successor* of the late
AMERICAN FARMER,
(which is discontinued,) and is published at the same office, at five dollars per year, payable in advance.

☞ When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

American Farmer Establishment.

BALTIMORE: TUESDAY, SEPTEMBER 16, 1834.

PATAGONIAN GOURD—On a visit to an agricultural friend in New Jersey last week, we were shewn a plant of the above name growing in his garden, which surpasses all the vegetables we ever saw for productiveness. Our friend informed us that he obtained and planted last spring *three seeds*. The quantity of vine and foliage is already prodigious, though apparently not yet near to its extent or maturity. The number of fruit was already very great, but the blossoms indicated that its bearing was only begun—certainly none of the gourds seemed near to their growth, though one of them hung from the vine, which had run over a fence, *full four feet long*, in the shape of a club. Our friend promised to send us one of the gourds when ripe. He understands that it is edible, being sliced and cooked like the egg plant. When we receive the one promised us we will speak further on the subject. *This* account is long enough, and it is not our fault if it is not *large* enough.

"SHOT WHEAT."—Many enquiries have been made at our office of late for Shot Wheat—an article introduced to the attention of the public by an *anonymous* writer in the Kittaning Gazette of (Pa.) who stated that the seed might be had in Baltimore. The editor of the paper above named has been called on for further information concerning this article, but has not, so far as we know, again mentioned it. From all the circumstances of the case we are led to suspect that the paragraph in the Kittaning paper is a hoax. No such article as Shot Wheat can be found or heard of in Baltimore. If the editor can give any information on this subject he will relieve much anxiety and enable us to answer enquiries more satisfactorily than at present.

Learn some useful art, so that you may be independent of the caprice of fortune.

For the Farmer and Gardener.

MR. EDITOR:—The account you have given in your paper, of the effects produced by the common practice of curing fodder, and especially the effects of steaming food for cattle, has been read by me with great attention; and it seems to come to the point which occurred to me some years ago; which, I will mention, after relating my manner of saving corn fodder.

I have for years been in the habit of saving my stalks by cutting them close to the ground, which may be done without injury to the grain, as soon as the husk on the corn has become dry; or on the approach of a frost that will destroy the blades. At such time, I have the stalks cut, and with the ears on, they are carried and set up in small shocks, which are tied near the tops with one or two stalks twisted together, to keep them from falling. These shocks being placed in straight rows through the field, the rest of the land may be ploughed and sowed—for I never sow among corn. The shocks may stand in this position, if desired, until after sowing is ended, when they are carried in, and the corn gathered into the crib.—The whole of the stalk and husk, I then have cut in a common cutting box, adapted to horse power, and fed to the cattle as wanted, which I find cattle will winter on as well as on the best of hay.

I will now relate the circumstance which this letter is intended to communicate. Some stalks which had been shocked in the manner mentioned, and had stood until they were pretty well dried, were taken in and cut in the box as usual.

In consequence of several days' rain, they were suffered to lie in a bin which was about six feet square, and eight or ten feet high, and was full of the cut stalks. When going to use some of them four days after they were cut, a board left to slide for the purpose, near the bottom of the bin, was drawn out, on which the smoke poured out of the space to such a degree as to induce the belief that the barn was on fire. The stalks which came out were quite black—some of them had undergone the putrefactive fermentation. All the mass was wet to dripping, and emitted a smell similar to that observed in a sugar house. The appearance of the stalks was such, that all thoughts of their being eaten was given over, and some of them were thrown out at the door. However, this opinion was soon found to be a mistake, for the cattle, directed by the sense of smell, were soon invited to the spot, where they were observed to be hooking and driving each other from the stalks, and catching a mouthful as they could, with an eagerness never shown for the best hay—their eagerness would not have been surpassed, if a cart-load of corn in the ear had been thrown to them. The rest of the cut stalks were spread, and when dried, were all eaten heartily by the cattle. Now sir, I should be glad to know if your science can account for the water which was found among the stalks—it could not have been imbibed from the air, for the box was air-tight, with the exception of a small opening in the top. The stalks were so dry, that had they been subjected to the pressure of a Burmah's press, I am sure there would not have been three gallons of water obtained from them; and they had the appearance of being soaked through and dripping with water. If steaming will have the same effect as this fermentation had, it will very much increase the value of food.

Yours, A FARMER.

Our correspondent, "A Farmer," has put our science to the test. We have neither room nor time, at present, to enter into an explanation of the facts contained in his most important and valuable communication. We often see essays in the several agricultural papers of the day, headed 'Agricultural Science,' and chemical essays on agricultural subjects, which we are always much pleased to see; those especially where the sermon which follows grows out of the text, and proves to be really scientific.

We have before given our theory applicable to the phenomena related in the communication of 'A Farmer,' and should be very glad to see some of our 'scientific farmers' take up this subject, and give us their theory—if ours is incorrect we should be glad to be set right.

MARYLAND HORTICULTURAL SOCIETY,
September 13, 1834.

Mr. Peter Coombs presented one bushel of Mercer potatoes.

Mr. T. Holmes presented seven varieties of exotic Grapes, viz. Parsely leaved Chasselas, Golden Chasselas, Bordeaux Purple, Black Prince, Tampraneau, red Chasselas, and Sultana, all fine specimens.

Mr. Robert Sinclair, sen. presented specimens of the Catawba, Bland and Isabella Grapes.

Mr. Geo. H. Keerl presented a specimen of the scarlet globe Dahlia.

Mr. Edward Kurtz presented a specimen of the purple globe Dahlia.

Mr. Robt. Sinclair, sen. presented a specimen of silver leaved Abele; a leaf 4 feet long of the Ailanthus, or Tree of Heaven; a sprig of Bignonia grandiflora; and the following Dahlias, viz. Lord John Russell, Lady Grantham, Theodore, Excellent Rose, and Arantia.

To be of noble parentage, and not be endowed with noble qualities, is rather a degradation than a glory.

THE FARMER.

Cornstalk Fodder.

In the last number was given an account of feeding milch cows with steamed corn-stalks; and it will be observed, that the quantity of food which kept the cows in good milking order, was very small when compared with what is usually consumed in dry fodder. We had fed both cows and horses, on stalks cut fine in the same way, but had given them in a dry state, for several years before the steam was adopted; but no comparison can be drawn, as to the saving of food by steaming from this trial, as the stalks had been given in waste. The mangers were filled, and when feeding time came, that which was not consumed was thrown under them for a bedding, no economy being necessary, as the stalks were plenty.

During the first year of feeding stalks in this way, we did not think of giving them to the horses, not yet having learned their value; but on passing by the horses' stalls one day, with some cut stalks in a bushel, intended for a young Devon, some were thrown to the horses which were standing to clover hay—they eat the stalks very heartily, in preference, and from that time we have never fed a horse with hay.

One of the horses was driven into town twice every day; and that one had an allowance of grain —But the other two were only used occasionally, and had no grain, unless they were taken out to draw a load of wood or were driven to town in a carriage, when in such cases they had a small allowance of grain given them. The quantity of stalks they eat cannot be estimated, as they were given to them as to the cows, without reserve. Our horses never wintered better when fed on the best of clover or timothy hay.

The man who attended to feeding was an experienced feeder from England, and consequently, was very much averse to the innovation of old customs, but before the spring, he became convinced of the value of this food, and reconciled to its use. About 8 acres of corn, which produced from thirty-five to forty bushels of corn to the acre, furnished the stalks which were sufficient to keep ten milch cows, three horses and one young heifer for five months.

Our experience goes to confirm the idea, that the portion of cornstalk which is below the ear, and is suffered to be lost, in the usual way of saving fodder, is of more value as food and manure, than the portion which is usually saved; and that this portion, which is left standing and is lost both as food and manure, is worth more, when properly used, than a crop of clover which the same ground would produce.

When it is taken into consideration the loss in the crop of corn by the present method of injudiciously mutilating the green stalk, which has been shown to amount to one-fifth of the whole crop of grain; and, that the present practice involves a loss in the fodder which equals the whole produce of the land for one year when laid down in clover, it would be supposed this subject must recommend itself to the most inattentive farmer, if he has any regard to his own interest.

Agricultural Geology.—Geology, like its sister science, Geography, signifies a description of the earth. Though both these sciences describe the earth, both do not describe it in the same points. The one tells what the divisions of the earth are, the other what those divisions are composed of. Geography gives the names and situations of continents, islands and countries—Geology, the elements and varieties of earths and soils, which compose continents and countries. Geography describes the situation of mountains—and Geology describes the elements which compose rocks, and the strata of rocks which compose mountains.

As a prominent object of Geology is to describe soils, and point out the modes of improving them, it comes directly home to the interests of every farmer. As it is the simplest and most readily learnt of all the sciences, no farmer can plead the want of time or capacity for acquiring it. The winter evenings of one season are sufficient for any farmer to obtain a knowledge of Geology, which will be of the greatest benefit to him, and with it much other science of a kindred character.

Three minerals, called quartz, felspar and mica, compose a great part of the rocks, and a greater part of the solid upon our globe. If to these, lime and hornblind be added, we have the elements of more than nine-tenths, if not of ninety-nine hundredths of all the rocks, mountains and continents upon the earth.

Of the three first, all the rocks commonly called granite are formed. These rocks, as divided by Geologists, are called granite, gneiss, and mica slate. Granite is composed of quartz, felspar and mica, promiscuouely arranged, and frequently in large masses; the quartz and felspar especially, the former being in separate beds weighing tons. In some instances whole ledges, and even mountains, are formed almost wholly of quartz. Mica, (isinglass) in the oldest granite, is sometimes found in sheets of one or two feet in diameter.

Gneiss is little more or less than slaty granite, the mica running in one direction, causing it readily to split.

Mica slate, which is also a common language, classed among the granite rocks, is composed of two instead of three ingredients, the felspar being wanting.

Soils, though formed from rocks, and of course like them in their elements, are composed of still fewer ingredients, and are more readily understood. Quartz, felspar and lime, are the only essential mineral substances in soils, which, with various proportions of vegetable, and sometimes of animal matter, form the whole variety of soils, from the richest meadow to the most barren sand heap.

Such being the great simplicity of Geology, together with its intimate connexion with the farmers' interests, every intelligent and enterprising cultivator of soils must be glad to improve the first opportunity to form some acquaintance with it. This opportunity can be rendered by the Baltimore Union Lyceum, to farmers and other citizens, of any county in the states, who will be at the trouble of sending for sets of Geological Specimens, which the Juvenile Department of the Society have collected in sufficient quantities to supply the country. Already, this Juvenile Lyceum has collected quartz, felspar, mica, hornblind, lime, granite, gneiss, mica slate, sandstone, greenstone, and many other rocks and minerals, sufficient to furnish a set of specimens for every county in the Union.

This opportunity for acquiring useful practical knowledge, farmers through the country can avail themselves of, by attending Education Conventions, as proposed on the first Wednesday of November next. At these Conventions, measures can be taken in the most distant county to procure, not only specimens of Geology, but of other departments of nature, as also of the arts.—From Baltimore, Charleston, Cincinnati, Philadelphia, New-York or Boston, where provisions are made for sending specimens, they can be procured by any County Lyceum or County Conventions which shall make the request.

AGRICOLA.

Forest Trees.

To the Editor of the Farmer and Gardener:

What I am about to narrate, relates not to the cultivated field, the dairy, or the milch cow, but to *Nature's* husbandry; not to Agriculture, but to Agriculture's elder sister: It asks at your hands the kind and respectful treatment, to which those claims entitle it.

My mind was long perplexed with the fact, that "where the oak has disappeared, after it had lifted its head to the springs of ages, another oak will not naturally rise, but some other tree." The same is equally true in relation to the chestnut, hickory, and many other trees. That the sycamore, the pine, or the maple, should seize upon the inheritance of strangers, may be accounted for—their seeds are winged by the Almighty, and prepared by Him, to take the wings of the wind; but that cannot be said, of the chestnut, hickory nut, or acorn. I believe the earth is filled with seeds almost indestructible in their constitution, ready to germinate whenever exposed to certain atmospheric action;—but that, we know, is not the case as to the nuts already mentioned; Nature uses them in no such way; on the contrary the law which she imposes upon them is, *vegetate or not.* These considerations harrassed me for years, whenever the subject passed before my mind; and the sight of a young growth of the class of trees last referred to, taking possession of soil, which had been occupied by those of a different family, "for time whereof the memory of man runneth not to the contrary," never failed to

suggest the interesting, but unanswered, and as I believed, unanswerable question, *Whence come these seedlings?* An occurrence a few years ago, removed all my difficulties upon the subject, and invited me to a field of speculation almost as interesting, as was that one enjoyed by St. Pierre, whilst observing his strawberry bush. The matter to you and your readers may seem not only unimportant but trifling:—I view it differently. I pretend to no profundity of skill in that particular department of science, whose responses about what I am writing would be considered oracular: "I am a plain blunt man that speaks right on that I do know," and draw conclusions for myself only, from premises of which I am in undisputed possession.

A few years since, a new road which I had laid out over a part of my farm, was much incumbered by the stump of a large purple mulberry tree, which however I did not cause to be removed, until it had exhausted my patience. Before a blow had been aimed at it by either hoe or axe, I discovered some green shoots along its sides, which upon examination, I found were mulberry cions of that year's growth: that interested me immediately in the condition of the stump, and induced me to attend particularly to its removal—When the work was done, (and it required many and hard blows to do it) I was astonished to find the roots in perfect health, full of sap, and able, as I believe, to sustain a tree as large as that one, which it had once borne—*that tree had been dead thirty years!*

I mentioned the fact to a strange friend of mine: I call him a *strange friend*, because he loves a pulley, a lever, or a cog-wheel, more than "wife or lawfully begotten children;" and would prefer the mazes of a mathematical solution, to all that blaze of beauty, which made the husband of Penelope unfaithful to his marriage vow. His character, however, has one redeeming feature: he loves nature, and delights to study her moods, He knew that I was incapable of misrepresenting, but that I might be mistaken—in short, he did not believe me, and so his manner told me. But very soon afterwards, conviction of the truth of my statement, was carried home to him, in a way which pleased me very much, for it humbled his pride—he is a botanist, and I had caught him napping.

In visiting one of his farms, he frequently passed a large mulberry tree, which died perhaps forty years ago,* and noticed a remarkably luxuriant growth among the branches of the old tree, which he supposed was Virginia Creeper, Poisonous Oak, or some other parasites. At length, however, he approached more nearly, and found the tree in the condition that I shall shortly endeavor to describe.

At our next interview, he mentioned what he had seen with all necessary humility, and proposed that we should visit the tree; which we did, after having procured (not one of 'Starks & Co's' axes, but) a small hatchet. We found nearly one half of the tree rotten; the hollow, occasioned by the decay, reaching the heart, and the bark which still remained on the sound part of the tree, sound only in stripes and spots. This describes the branches of the tree, as well as its body. The sap had recently ascended from the root, and stealing along between the bark and wood, wherever it could trust their soundness and adhesion, throwing out occasiocally through a hole in its covering, a vigorous twig, had gained the branches of the tree. Immediately on the top of the trunk, which was unusually flat, there was as thrifty a young mulberry as I ever saw;—its stalk was as large or larger than my wrist, and my limbs are more brawny I believe, than were those of him who slew Goliah. The dead limbs of the old tree, shaking young, and very large and green leaves, looked like extreme old age, decked out in all the follies of youthful fashion. Indeed the appearance of the tree was so extraordinary, that we intended sending a drawing of it to the American Farmer; but the departure from our neighborhood of the gifted young artist, upon whose pencil we relied, prevented the execution of our purpose. By the help of our hatchet, we traced the veins of ascending sap; and be it remembered, that that *ascent* was from *the root, between the bark, and the ligneous part of the tree.* It appears to me that this might incommode a very popular theory.

Some years since (I think it was in 1808) thousands and thousands of mulberry trees in this region, died, without any cause for it, known to us;—within the few years last past, myriads and myriads of cions of the same family have been taking their places. My opinion upon the subject is this: Some obstruction in the earth or air prevented the ascension of the sap from the roots to the trunks of the late growth of mulberry trees, and having no blood, they died;—that obstruction having been removed, the sap, which has remained in the roots of the old trees for that purpose, is now supplying us with a new stock of trees. And if the root of a mulberry tree, can retain its sap in life and health, for thirty years, prepared whenever Nature shall say "Now's the day and now's the hour" to send up, rear, and sustain another tree, may not the same policy imprison the sap, in the same way and for the same purposes for centuries? And if this be true in relation to the mulberry trees, may it not be equally true as to the oak, the chestnut, the hickory? I have no doubt of it.

That there shall be a rotation of crops, is a canon of vegetable life, which Nature always enforces in her own garden. That different classes of plants and trees, require different kinds of pabulum, there can be no doubt; and where Nature is not interfered with, or human beings are sufficiently intelligent upon the subject, that succeeding crops may restore to the soil peculiar properties withdrawn by their predecessors, is, I think, equally clear. This oak, with his thousand rootlets, feeds principally upon the soil; and after he has enjoyed it for centuries, he leaves it too poor to support a son or heir of his. The pine takes the place; and whether, by means of his tap-root, he draws supplies from depths to which the oak had never penetrated, or feeds upon the air which roars through his branches, is unimportant; he can live where the oak would starve; and not only can he live, but constantly enrich the soil which he overshadows. He will scarcely permit the sun to look at his territory; he dresses it richly, in his own "cast off garments;" he protects it from "summer's heat and winter's cold;" and when his life tenancy has expired, he dies full of honors, leaving the estate so much improved by his "musing," that an oak may succeed to it, and again waste it "in riotous living." Will that oak spring from an acorn? No; but from the old oak root, which has been waiting patiently, until the state of the times would justify the commencement of business afresh.

I am fully persuaded that when a forest has completed its rotation of crops, the soil is in as good condition, as when that rotation was commenced—that the same may be effected by a rotation of cultivated crops—and that the principle which directs the operations of Nature as to the alternations of her products, is the most important secret in agricultural improvement.

How perfect is the economy of Nature!—
As full as perfect in a hair, as heart;
As full as perfect in vile man that mourns,
As the rapt seraph, that adores and burns.

Not only may madness be charged upon the "undevout astronomer," but upon every intelligent being who does not see and acknowledge that "the rolling year is full of" God! But you shall not hear me moralize: and I leave you, asking forgiveness for such an outrageous trespass upon your time in behalf of an old mulberry stump! For no other reason, but that he loved one old mulberry tree dearly, do I venture to assume the name of WILL: SHAKSPEARE.

CHINESE MULBERRY.—The Mulberry seed, furnished to several persons in Massachusetts, by the Missionaries in China, have been extremely prolific, and the prospects are highly flattering for the manufacture of New-England silk. The following extract from an intelligent and enterprising gentleman in Northampton, received within a few days, will be read with interest.—"My prospects brighten every day, as it regards the silk business. I receive encouragement from every quarter.—Gentlemen of the first respectability, possessed of capital, are ready to engage in it. My trees have grown wonderfully. I shall sell twelve or fifteen hundred dollars worth this season, and shall propagate largely next season, if my life is prolonged. I wish you would come up here and settle yourself down. You will find it a delightful employment, to produce so rich a substance from the soil. It is a business which competition cannot affect, excepting for the better. For it is a fact that the more there are engaged in it, the better it will be for each one. The time is not far distant, when New-England will produce Silk equal in value to the Cotton of the South—of this no one can doubt, who has given any attention to the subject. I have already calls from gentlemen from every quarter, to see my trees and obtain information about the business. I am now planning a building to be erected the coming winter for the feeding of worms—two hundred feet long by twenty-four feet wide, two stories high—which I shall place below the garden next to the woods. I have sold one thousand trees to a gentleman for $250, and to others $500 worth more; my number will soon be taken up."—*Bost. Cour.*

* I knew a gentleman, who saw the sheet of lightning descend upon it, which split its trunk from top to bottom.

THE BREEDER & MANAGER.

[From the Farmers' Series.]

THE SHORT HORNS—A milch cow, good for the pail as long as she is wanted, and then quickly got into marketable condition, should have a long and rather small head; a large headed cow will seldom fatten or yield much milk. The eye should be bright, yet with a peculiar placidness and quietness of expression; the chaps thin, and the horns small. The neck should not be so thin as that which common opinion has given to the milch cow. It may be thin towards the head; but it must soon begin to thicken, and especially when it approaches the shoulder. The dewlap should be small; the breast, if not so wide as in some that have an unusual disposition to fatten, yet very far from being narrow, and it should project before the legs; the chine, to a certain degree fleshy, and even inclining to fullness; the girth behind the shoulder should be deeper than it is usually found in the short-horn; the ribs should spread out wide, so as to give as globular a form as possible to the carcase, and each should project farther than the preceding one to the very loins, giving, if after all the milch cow must be a little wider below than above, yet as much breadth as can possibly be afforded to the more valuable parts. She should be well formed across the hips and on the rump, and with greater length there than the milker generally possesses; or if a little too short, not heavy. If she stands a little long on the legs, it must not be too long. The thighs somewhat thin, with a slight tendency to crookedness, or being sickle-hammed behind: the tail thick at the upper part, but tapering below; and she should have a mellow hide and a little coarse hair. Common consent has given to her large milk-veins; and although the subcutaneous or milk-vein has nothing to do with the udder, but conveys the blood from the fore part of the chest and sides to the inguinal vein, yet a large milk-vein certainly indicates a strongly developed vascular system—one favourable to secretion generally, and to that of the milk among the rest.

The last essential in a milch cow that we shall mention is the udder, rather inclining to be large in proportion to the size of the animal, but not too large. It must be sufficiently capacious to contain the proper quantity of milk, but not too bulky, lest it should thicken and become loaded with fat. The skin of the udder should be thin, and free from lumps in every part of it. The teats should be of moderate size; at equal distances from each other every way; and of equal size from the udder to nearly the end, where they should run to a kind of point. When they are too large near the udder, they permit the milk to flow down too freely from the bag, and lodge in them; and when they are too broad at the extremity, the orifice is often so large that the cow cannot retain her milk after the bag begins to be full and heavy. The udder should be of nearly equal size before and behind, or, if there is any difference, it should be broader and fuller before than behind.*

* There are some doggrel lines, which so well express the great number of the good points of such a cow as we have been now describing, that we are tempted to copy them from the Farmer's Magazine:

'She's long in her face, she's fine in her horn,
She'll quickly get fat without cake or corn;
She's clean in her jaws, and full in her chine,
She's heavy in flank, and wide in her loin.

'She's broad in her ribs, and long in her rump,
A straight and flat back without ever a hump:
She's wide in her hips, and calm in her eyes,
She's fine in her shoulders, and thin in her thighs.

'She's light in her neck, and small in her tail,
She's wide in her breast, and good at the pail;
She's fine in her bone, and silky of skin—
She's a grazier's without, and a butcher's within.'

The quantity of milk given by some of these cows is very great. It is by no means uncommon for them, in the beginning of the summer, to yield 30 quarts a-day; there are rare instances of their having given 36 quarts; but the average measure may be estimated at 22 or 24 quarts. It is said that this milk does not yield a proportionate quantity of butter; and that, although these cows may be valuable where the sale of milk is the prime object, they will not answer for the dairy.

That their milk does not contain the same proportionate quantity of butter as that from the long-horns, the Scotch cattle, or the Devons, is probably true; but we have reason to believe that the difference has been much exaggerated, and is more than compensated by the additional quantity of milk. At the first introduction of the improved breed, the prejudice against them on this account was very great, and certain experiments were made, by the result of which it was made to appear that the milk of the Kyloe cow yielded double the quantity of butter that could be produced from that of the improved short-horn. Two ounces were obtained from the milk of the Kyloe, and one from that of the short-horn.

This aroused the advocates of the new breed, and they instituted their experiments, the result of which was much less to the disadvantage of the short-horns. Mr. Baily gives an account of an experiment made by Mr. Walton of Middleton.

He took from his dairy 6 cows promiscuously, and obtained the following quantity of butter from a quart of the milk of each of them:—

	oz.	*dwts.*
No. 1,	3	6
2,	1	6
3,	1	12
4,	1	10
5,	1	14
6,	1	6
	10	8

which, divided by 6, leaves nearly 1 oz. 14¾dwts. or about 7-8 of the weight of butter from the same quantity of milk. Then, the increased quantity of milk yielded by the short-horn gave her decidedly the preference, so far as the simple produce was concerned.

This experiment brought to light another good quality in the improved short-horn, which, if not altogether unsuspected, was not sufficiently acted upon—that she improved as a dairy-cow as she got older. The cow, a quart of whose milk produced more than 3 oz. of butter, was six years old; the other five were only two years old; at all events the experiments proved that her milk was richer at six years old, than it had been at two. This is a subject which deserves investigation.

Another circumstance is somewhat connected with such an inquiry. The Kyloe and the long-horn cattle seem to care little about change of situation and pasture; but the short-horn is not so easily reconciled to a change; and her milk is not at first either so abundant or so good as it afterwards becomes.

A prejudice likewise existed, and perhaps does yet in the minds of some dairymen, against the larger improved short-horns. The breed generally are great consumers; and it was also supposed that, in proportion to the condition of the cow, she was likely to run to flesh instead of yielding milk, and therefore a rather small cow was selected, and one that did not carry about her many proofs of point.

That there is a great difference in the quantity of food consumed by different breeds of cattle, cannot be doubted; and that the short-horns occupy the highest rank among the consumers of food is evident enough; but we never could be persuaded that the difference of size in the same breed made any material difference in the appetite, or the food consumed. When they stand side by side in the stall or the cow-house, and experience has taught us the proper average quantity of food, the little one eats her share, and the larger one seldom eats more, even when it is put before her. There are occasional differences in the consumption of food by different animals, but these arise far oftener from constitution, or from some unknown cause, than from difference of size. Experience does, however, prove beyond the possibility of doubt, that the larger cattle, the breed and other circumstances being the same, yield the greatest quantity of milk.

Experience has also proved another thing,—that the good grazing points of a cow, and even her being in a fair store condition, do not necessarily interfere with her milking qualities. They prove that she has the disposition to fatten about her, but which will not be called into injurious exercise until, in the natural process of time, or designedly by us, she is dried. She will yield nearly as much milk as her unthrifry neighbour, and milk of a superior quality, and at four, five or six years old, might be pitted against any Kyloe, while we have the pledge that it will cost us little to prepare her for the butcher, when we have done with her as a milker. It is on this principle that many of the London dairymen now act, when they change their cows so frequently as they do; but whether this, even allowing the rapidity with which the beasts fatten, is the best and most profitable mode of management, will be the subject of future inquiry.

Some time after Mr. Walton's experiment, the following observations were made by Mr. Calvert, of Sandysike, near Brampton, on the quantity of butter yielded by one of his improved short-horns. The milk was kept and churned separately from that of the other stock, and the following is the account of the number of pounds of butter obtained in each week,—7, 10, 10, 12, 17, 13,

13, 13, 15, 16, 15, 12, 13, 13, 13, 14, 14, 13, 12, 12, 13, 11, 12, 10, 10, 8, 10, 9, 10, 7, 7, 7.

From this it appears that there were churned 373 pounds of butter in the space of 32 weeks. The cow gave 28 quarts of milk per day, about midsummer, and would average nearly 20 quarts per day for 20 weeks. She gave more milk when she was depastured in the summer than when she was soiled in the house, in consequence of the very hot weather. She was lame during six weeks, from 'foul in the feet,' which lessened the quantity of milk during that time; and the experiment was discontinued, because there was not a sufficient supply of turnips, and the milk of the whole of the herd was rapidly diminishing. For the first fortnight after calving, she was allowed a little broken corn; and from that period to the commencement of the turnip-season, she lived entirely on grass, with some cut clover, when it was necessary to shelter her from the inclement heat. The pasture was by no means of a superior quality.

After such a record—and it is far from being a singular one,—'there can be no doubt,' to adopt the language of the reporter, 'of the possibility of raising a breed of milking short-horns, which will surpass every variety of cattle in the kingdom.' We may, perhaps, safely add, that we have that breed, and that it only requires a little care in the selection, and in crossing, to perpetuate it.

We will take a very rapid survey of the few counties not already described, and in which the short-horns are the prevailing breed.

Cumberland—The native breed of Cumberland was a small long-horned beast, yielding a fair quantity of milk, and of good quality; answering well for the dairy, but not so profitable as grazing cattle. With these were intermingled the Kyloes and the Galloways, both of them quicker feeders than the old Cumberlands. They were generally bought in about October, and turned all the winter on the pastures out of which the fat cattle had just been sold—a little hay being allowed them, according to circumstances. They were kept about a twelvemonth, and paid very well.

The long-horns were most used for the dairy, and chiefly for the production of butter. They yielded from one to two firkins per annum, according to their goodness and size: the average produce was about 84lbs. per cow. Some of them would yield eight quarts of milk per day during the season, and three or four pounds of butter per week. The Cumberland butter used to be in considerable request. The cheese was an inferior article, and chiefly made of skimmed milk.

The short-horns were not slow in penetrating into Cumberland, and establishing themselves there. They were first used to cross the native and Scotch breeds, and sometimes with considerable success. Mr. Bates, of Halton Castle, attempted a cross between the Kyloe cow and the short-horn bull. His object was to increase the quantity of milk from the Kyloe, and to preserve its quality; and to gain that, which every one used to imagine the short-horn was sadly deficient in, hardiness. He hoped likewise to reduce the great consumption of food by the short-horn, and, at the same time, to retain his early maturity. To a very considerable extent he succeeded. Mr. Maynard, than whom there could not be a better judge of cattle, and from whose stock descended some of the best short-horns of the north, hired a bull from Mr. Bates, to try what effect would be produced on some of his own pure breeding stock. That the short-horns could be materially improved by such an admixture could scarcely be expected; but the value of the old breed of the country has been materially increased.

The pure short-horn is now zealously cultivated in Cumberland, and by none more so, or more successfully, than Mr. Maynard.

[From the London Lancet.]

LECTURES ON VETERINARY MEDICINE, *Delivered in the University of London, by Mr. Youatt.*—LECTURE IV—CONCLUDED.

The Schneiderian Membrane, as indicating Inflammatory Action in the Respiratory Passages.—The mucous membrane of the nose is distinguished from other mucous surfaces, not only by its thickness but its vascularity. The blood-vessels are likewise superficial; they are not covered even by integument, but merely by an unsubstantial mucous coat. They are deeper seated indeed than in the human being, and they are more protected from injury, and therefore there is far less hæmorrhage from the nostril of the horse than from that of the human being, whether spontaneous or accidental. Lying immediately under the mucous coat, these vessels give a peculiar, and to us a most important tinge to the membrane, and particularly observable on the septum. They present us with a faithful indication of the state of the circulation, and especially in the membranes of the other respiratory passages with which this is continuous.

We lack many of the auxiliaries of the human practitioner. Our patients are dumb; they can neither tell us the seat nor the degree of pain, and our blunders, unfortunately for us, sometimes, are never buried with the patient. Well, we must use greater diligence in availing ourselves of the advantages that we do possess, and we have some, and very important ones too. The varying hue of the Schneiderian membrane is the most important of all, and, with regard to the most frequent and fatal diseases of the horse, those of the respiratory passages, it gives us almost all the information with regard to the state of the circulation in those parts that we can possibly require. Veterinarians, too, generally overlook this. It has not yet been sufficiently taught in our schools, or inculcated in our best works on the pathology of the horse.

It is the custom with most veterinary surgeons, and almost with every horseman who will take any pains to ascertain for himself the state of his sick horse, to turn down the lower eyelid and to form his opinion of the degree of general inflammation by the color which the lining membrane of the lid presents. If it is very red, he concludes that there is considerable fever; if it is of a pale pinkish hue, there is comparatively little danger. Why, this is a very important examination, and the conclusion which we draw from it is generally true; but on the septum of the nose we have a membrane more immediately continuous with the membranes of the respiratory organs—more easily got at—presenting a larger surface—the ramifications of the blood-vessels better seen, and, what is truly important, indicating not only the general affection of the membranes, but of the membranes with which we are most of all concerned.

Let me urge you to attend more to this. Study the character of that portion of the membrane which covers the lower part of the septum; that which you can most readily bring into view.—Day after day, and under all the varying circumstances of health and disease, study it until you are enabled to recognise, and you soon will, and that with a degree of exactitude you would have scarcely thought possible—the pale pink hue when the horse is in health and quiet,—the increasing blush of red, and the general and uniform painting of the membrane, betokening some excitement of the system,—the streaked appearance when inflammation is threatening or commencing,—the intensely florid red of inflammation becoming acute,—the starting of the vessels from their gossamer coat, and then seeming to run bare over the membrane, when the inflammation is at the highest,—the pale ground with patches of vivid red, showing the half-subdued, but still-existing fever,—the uniform color, but somewhat redder than natural, indicating a return to a healthy state of the circulation,—the paleness approaching to white, indicating a state of debility, and yet some radiations of crimson, showing that there is yet much irritability, and that mischief may be in the wind,—the pale livid color warning you that the disease is assuming a typhoid character,—the darker livid announcing that the typhus is established, and that the vital current is stagnating,—and the browner, dirty painting, intermingling with and subduing the lividness, and telling you that the game is up.—Study these things, Gentlemen, they will be guides to your opinion and your treatment, which you can never too highly appreciate.

THE GARDENER.

[From Nuttall's Introduction to Botany.]

GENERAL COMPONENTS OF THE VEGETABLE STRUCTURE.—Vegetables, like animals, are composed of fluids and solids. The fluid parts produce those which are solid; and the only pabulum of plants being liquid, it is necessary that there should be an organic vascular system for its distribution, and that it should, no less, possess the vital power of assimulation, in order to supply the growth which takes place, and to diversify the products which characterise every species of perfected plants.

The general solid components of the vegetable system are: the *membranous*, the *cellular*, the *vascular*, and the *glandular textures;* the *ligneous fibre*, and the *epidermis.*

The general fluids are the *sap* and the *proper juice.*

I. OF THE SOLID COMPONENTS.—The first which we shall examine is the *membranous texture*, consisting of an exquisitely thin, transparent, colorless, film-like membrane or pelicle, found in every individual of the vegetable kingdom. The nicest microscopical examinations are unable to throw any light on its intimate structure, so that no appearances of organization

have yet been detected in it. It is that component of the vegetable structure, which constitutes its basis; or which in its lax state forms the cellular and the glandular textures and the epidermis; a little condensed it constitutes the vascular texture, and perhaps still more consolidated forms the ligneous fibre; so that it enters into the whole of the solid materials of the vegetable.

The *cellular texture* is formed from the membranous. It presents, in the parts of a plant where it is not compressed, the appearance of hexagonal cells, similar to the geometrical cells of a honeycomb, although sometimes of a longitudinal figure. Mirbel believed them to communicate with each other by means of pores and slits, about 300th part of a line in diameter; and that through those perforations, the vegetable juices they contain were slowly transfused. He asserts, also, that these pores are surrounded with borders; and that the perforations are few and scattered in the true hexagonal cells, but numerous and arranged transversely in regular series in the longitudinal openings. The membrane itself is so thin, that when examined through a microscope, with the light thrown obliquely upon it, it appears iridescent; but its organization is too minute to be determined by any magnifying power with which we are acquainted. When separated and put into water it very quickly resolves into a kind of mucilage, but in the living state resists the action of water with which it is often filled.

The cellular texture, in one form or other, enters into the composition of almost every vegetable organ. It is dry in some parts, but in other situations it receives fluids; and in it, principally, the various secretions of the plant are deposited. Thus, it is generally filled with mucilaginous, resinous, oily, or saccharine juices; but sometimes the cells contain air only. In the bark of plants the cellular texture is found immediately under the cuticle, filled with a resinous juice, which is of a different color in different species of plants, but most frequently green. In this situation it is the seat of the color of the bark, in the same manner as the *rete mucosum*, or reticulated capillary membrane situated under the human cuticle, is supposed to give color to the skin. The cells seem filled with the same green juice in leaves, which are composed of a layer of cellular substance placed betwixt two layers of cuticle. The medulla or pith of plants is, also, composed of these cells, filled in young and succulent plants and branches with water, or watery fluids; but in older plants, and in the trunks and branches of trees, not succulent, they are generally empty. In the latter the shape and structure of the cells are most conspicuous, and easily observed. Thus, if a transverse, or longitudinal section of a twig of *Spanish Broom*, in the second year of the growth of the twig, be placed under the microscope, or even a common lens, the pith of it displays the hexagonal cells, with the transparent iridescent appearance of the membrane forming their walls. It is well seen also by the aid of the microscope in the pith of many other plants. The petals of flowers are almost entirely composed of cellular texture, the cells of which are filled with juices fitted to refract and reflect the rays of light, so as to produce the brilliant and delicate tints with which the pencil of nature has embellished them. In the same manner it enters into the composition of the stamens, the stigma, and the pollen. The fleshy parts of succulent roots, and of pulpy fruits, are formed of this cellular texture filled with different juices according to their nature.

When the cellular texture is compressed, the cells nearly form parallelograms, as in the leafstalk of the Artichoke, in which they have a somewhat tubular appearance. The cells are proportionally more abundant in herbaceous plants than in trees; and in the younger than in the older branches.

Such is the appearance of the cellular texture. It enters as a component into almost every part of the vegetable structure. There are, indeed, some plants, as the Fuci and other marine vegetables which appear to be altogether composed of cellules.

The importance of the cellular texture, as being, probably, the elemental structure of the whole vegetable, has been already adverted to in our remarks on Vegetable Individuality. We shall now add some remarks on the functions of these *cellules*. Mirbel and others have asserted, that the cellules are formed merely by separating diaphragms, and that their parietes are common to each other, and form a sort of net-work through the vegetable. There is much better reason, however, to believe that these bodies are individually distinct, and only aggregated in masses so as to form the vegetable tissue. These vessels are of three kinds, round, oblong, and cylyndric; by boiling, the tubes and vesicles are readily separated wholly from each other, showing that each is distinct from the rest, though impressed by juxtaposition. They are entirely destitute of all visible pores, and have between their layers and bundles *intercellular spaces*, filled usually with air, and having commonly a communication with the cuticular pores. But it remained for Amici to discover the real functions of these vessels, and he has fully demonstrated that their parietes are filled with a *circulating* fluid, rendered visible as such by moving opaque globular atoms, floating in it and performing circuits of different degrees of velocity. In some the round was made in 30 seconds, in others only a third of that time was required to perform it. These moving atoms are green in the leaves, and give origin to their color; in the numerous and varied colors of petals, &c. they are of many other hues. The term *chromule* has lately been employed to designate this resinous coloring substance, which, though at first green in the leaves, in the autumn becomes red or yellow, and is then similar to what it is in the calyx and corolla so colored. After boiling the cellules, the *motory atoms* are still visible in all their original dimensions, but steeped in hot oil they disappear from the cells; they are also quickly disorganized in the growing plant, when salt or saccharine water filters into the vegetable; so that, though the cells have *no visible pores*, they are still capable of rapidly absorbing fluids.

The floating atoms, after performing their round of circulation, become fixed to the sides of the cells, and at length the vessels, clogged with these bodies, must become opaque and turgid with matter so as to assist in forming the massive solids of vegetable bodies. The appearance of these globular atoms, imperfectly examined, led to the belief that these cellules were porous, a fact wholly at variance with the closed circulation carried on in their parietes.

These cells and tubes generate others from their sides and bases. Amici observed in *Chara* the progressive formation of a perfect vesicle at the base of a young branch with three internodes of cells. In the first a rapid circulation was visible; a more languid motion existed in the second; while the third only exhibited a transparent vesicle with some *immovable* rudiments only of motory globules; but after a while the whole attained a perfect and equal motory developement.

[From the Gardener's Magazine.]

A successful Mode of securing a Crop of Fruit on Pear Trees. By Mr. B. Saunders, Nurseryman in the Island of Jersey.

Sir.—The fact that many disappointments are experienced by gardeners, and also by amateurs, in their endeavor to procure crops of many fine sorts of pears, is so well known, that it needs only to be mentioned to be assented to. The practical application of the following suggestion will, however, remove, in many instances, these disappointments, and insure good crops.

There are many varieties of pears, which, every year, blossom very abundantly; and yet, to the great disappointment of the cultivator, the whole of the flowers fall off without sitting a single fruit, although the soil and situation may be very congenial, and every care has been taken in planting, &c. This is the case with the Duchess d'Angouleme, and with many others I could mention. The trees of these varieties, according to my observations, devote the whole of their strength and sap to the production of a superabundance of blossoms; but, unless they are assisted by art, they have not sufficient strength to set their fruit. In order, then, to remedy this defect, and to assist nature as much as possible, I have adopted the following plan, with great success and satisfaction, for the last three years:—

Take a pair of scissors (such as are used for thinning grapes,) and go over the corymbs of flowers, or rather of flower-buds, as soon as they are sufficiently elongated to allow the points of the scissors to pass between them (that is, some days before the blossoms are expanded,) and thin them; leaving only five or six blossoms in each, according to the size of the corymb: always preferring to leave the flowers which have the stoutest stalks, and those which are nearest the centre. This operation has the effect of diverting the sap to the flowers which remain, and gives them sufficient strength to set from one to three fruits in each umbel; which will prove a sufficient crop, and will repay the labor bestowed. Another mode, less tedious than the above, is also practised here, with success, on young trees. It consists in deferring that part of the pruning of them which is termed shortening the young wood, until the blossoms are in about the same state as is described in the above directions for thinning, and then shortening them back to the required length.

This also checks the progress of the sap, and enables the tree to set fruit very freely. I am aware that my plan is a tedious one, and one that is almost impracticable on a large scale; but it is decidedly an excellent plan for dwarf trees in gardens, whether they are cultivated in the *quenouille* mode, against walls, or as espaliers; as these trees come within the reach of the hand, of a pair of steps, or of a ladder. In the hope that these remarks may, through your indulgence, avail my fellow-laborers in horticulture, at the coming season, I am, Sir, yours, &c.

BERNARD SAUNDERS.

Nursery, Island of Jersey, Dec. 6, 1833.

We recommend the above article to the particular attention of young gardeners. The system of disbudding advised in the preceding paper by Mr. Callow, and that of thinning out blossoms suggested in the above paper by Mr. Saunders, are applicable to all fruit trees; and, if generally adopted, would insure important results. We know an instance of a large apple orchard, the property of a commercial gardener in Kent, in which a knife has never been used: every thing is effected by disbudding, and pinching out young wood with the finger and thumb. The proprietor is not a scientific gardener; and he adopted the above practice from no particular theory, but simply from his own observation and experience, to save labor, and to insure good crops of large fruit. We hope to see his orchard next summer, and to report on it.—*Cond.*

[From the Gardeners' Magazine.]

On taking up the Roots of the Scarlet Runner in the Autumn, preserving them through the Winter, and replanting them in Spring—By Mr. JAMES CUTHILL, Gardener to Lawrence Sullivan, Esq. Broom House, Fulham.

I have made a discovery, with respect to the scarlet runner, which, I am told, may prove of some consequence both in the management of gentlemen's gardens, and those of cottagers.

In the month of November last, when digging the ground where the crop of runners had grown, I could not help noticing the large size of the roots; and it occurred to me that, if I took them up, potted them, and kept them in a cold pit during the winter, they might furnish another crop the following spring. I tried the experiment on two of the best roots, potting them, and keeping them in a cold pit till the 1st of February. At that time I put them into a hot-house, in which the average temperature was about 60°. They soon began to send up strong shoots, and to show flower in abundance from the ground upwards. They are now about 12 ft. high, and make a very good appearance in a green-house, where they pass with many for a new species of plant.

If I had saved thirty or forty roots, and had put them in heat in spring, in the manner done with georginas, and if I had turned them out in the open air about the same time that these plants are turned out, I certainly should have been able to gather kidney beans a month sooner than is done by the usual practice of sowing in the open garden.

In cottage gardens, the roots might be taken up every autumn, and preserved in the same way as those of potatoes; and, by being planted on a fresh piece of ground in spring, they would not only produce a much earlier, but a much more abundant crop than one raised from seeds.

Fulham, May 10, 1834.

MONTHLY STRAWBERRIES.—Mr. John Cowles of this village, has a small bed of monthly strawberry vines, from which he now picks daily ripe berries. Two or three roots were presented to him last autumn; he put them in a box, and kept them in his house during the winter, and in the spring transferred to his garden. They have borne every month since he has had them, except February; and from two or three roots have spread to a bed of two feet square. The berries are very large, and the flavor delicious. We saw the bed last week: the blossoms were very full upon it, young berries set in great numbers, and ripe ones on the stems. Monthly Strawberries may be quite common to our readers, but these are the first we have ever seen. A notice was recently published in the New York Commercial Advertiser, stating that a gentleman in New-Haven had a large bed of them, and was able to send to market every morning quite a quantity. If they are not common, they are worthy the attention of horticulturists, for the vine appears to bear with more exuberance than the common vine.—To have berries every month in the year—or eleven months of the twelve—of the finest flavor which the palate can receive, would be to us very desirable.—*Poughkeepsie Telegraph.*

MISCELLANEOUS.

[From the Farmers' Register.]

IMPROVED BEE-HIVE.—The box or hive to be made of inch plank—say about 2 feet 3 inches by 12 inches wide—the upper part of the box to be partitioned off, allowing just space sufficient to admit of a drawer of about 10 by 12 inches deep. This drawer is to slide upon the horizontal position, and to be made to fit the inside of the box exactly. In the bottom of the drawer, a hole is to be made, say about one and a half inch in diameter, and a corresponding one in the partition, so as to allow the bees to pass up from the lower part of the hive into the drawer. In the outer side of the drawer, a pane of glass is to be fixed, to ascertain when the drawer is filled with honey. Over the glass, a sliding shutter is to be placed, to exclude the light: or the upper end of the plank, forming the back side of the box or hive, may be sawed off, and fastened with a hinge and button, so as to answer the place of the sliding shutter. When the honey is wanted for use, remove the shutter from before the glass, and having ascertained the drawer is filled, introduce a little smoke into the top of the drawer by means of a tobacco pipe; and when the bees have been driven into the lower part of the hive, separate the drawer and partition, with a case knife, remove the drawer, and having emptied it, return it to its place again, and the bees will commence working in it immediately. By this method the honey will be always pure, without bee-bread or dead bees, and not a single bee need be destroyed; and moreover, it has been tested by many years trial, and found to answer the intention completely.

P. S.—The drawer should have a top screwed on, so as to be more readily opened when the honey is to be taken out; and any space between the drawer and the sides, or the top of the hive, should be filled by some kind of cement, so as to prevent insects from making a lodgement within the hive. Z.

Steam-Boiler.—This is an implement that no Farmer or Planter should be without, as potatoes, particularly, are nearly double in value, for feeding and fatting, when boiled. Turnips and other roots, and pumpkins, are also much improved, as food for cattle, by a similar process.

Boiled clover-hay is found very good for keeping Swine, during winter; and we are of opinion, that if fed to Milch-cows, during that season, it would greatly improve the quantity of their milk, and keep them in better order, than when fed dry to them. We believe this to be well worthy of a fair experiment, by having a vat, or box, to hold the hay sufficiently large for the purpose.

MELONS.—A French periodical gives the following method of hastening the ripening of melons. Spread on the melon and round it a thick couch of from one to two inches of pounded charcoal. Lampadius tried this plan at Frieburg in 1813, and succeeded in making melons ripen in a box of earth in the open air, during the summer of that year, in the mining district of Saxony. The surface of the earth thus covered with charcoal had at noonday a temperature of 37 50 to 47 50 of Reaumur, while at the same time the thermometer in the shade was only at from 15 to 20, and in the sun at 25 to 37 50.

The late Admiral Sir H. Blackwood when an unemployed Lieutenant, at the outbreak of the revolution, went to Paris. He was requested by some friends to take charge of a small parcel which on his arrival in that city was seized and found to contain letters. Blackwood was immediately committed to prison; but, it appeared on examination that the letters were not of a political nature, he was taken before the Municipal Council, and it was asked of him whether he could find any responsible person, who could be security for his appearing before the Convention, to which the business was referred. "With my head I will go bail for Mr. Blackwood," said M. Lafitteau, "I know him, and he is a man of honor." When this unpleasant affair was settled, and Blackwood was about to return, he requested to know of M. Lafitteau how he could evince his gratitude. "By sending me a pair of English leather breeches," was the reply, and it was of course faithfully done.

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BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY.

	PER.	FROM	TO
BRANDY, Apple,	gallon.	$0 27	$—
Peach,	"	—	—
BEANS, white field,	bushel.	—	—
BEEF, on the hoof,	100lbs.	4 00	5 00
CORN, yellow,	bushel.	66	68
White,	"	68	69
COTTON, Virginia,	pound.	—	—
North Carolina,	"	11	13
Upland,	"	14	15
FEATHERS,	pound.	—	37
FLAXSEED,	bushel.	1 00	1 25
FLOUR—Best white wheat family,	barrel.	6 50	7 00
Do. do. baker's	"	6 00	6 50
Do. do. Superfine,	"	5 00	5 25
Super Howard street,	"	5 12	5 31
" " wagon price,	"	5 00	5 25
City Mills, extra,	"	5 25	5 37
Do.	"	5 00	5 25
Susquehanna,	"	5 25	—
Rye,	"	3 37	—
GRASS SEEDS, red Clover,	bushel.	4 50	5 00
Timothy (herds of the north)	"	3 00	—
Orchard,	"	3 00	—
Tall meadow Oat,	"	2 50	—
Herds, or red top,	"	1 25	—
HAY, in bulk,	ton.	—	13 00
Pressed,	100 lbs	—	90
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
LIME,	bushel.	30	35
MUSTARD SEED, Foreign,	"	4 50	5 00
Domestic,	"	5 00	—
OATS,	"	29	30
OIL, linseed,	gallon.	—	90
Castor	"	1 70	1 80
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	—
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	2 75	—
Ground,	barrel.	1 37	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	62	—
TOBACCO, crop, common,	100 lbs	3 50	5 00
" brown and red,	"	4 50	6 00
" fine red,	"	6 00	8 00
" wrappery, suitable for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	13 00	17 00
" fine yellow,	"	15 00	22 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	4 00	—
Rappahannock,	"	3 00	4 00
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	1 08	1 12
Red,	"	95	1 06
WHISKEY, 1st pf. in bbls.	gallon.	28	29
" in hhds.	"	26	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 75	—
To Wheeling,	"	1 50	—
		washed.	*unwash*
WOOL, Prime & Saxon Fleeces,	pound.	50 *to* 60	24 *to* 26
Full Merino,	"	40 50	22 24
Three fourths Merino,	"	35 42	22 24
One half do.	"	30 35	21 22
Common & one fourth Meri.	"	28 30	18 20
Pulled,	"	28 31	18 20

FARMERS are informed that ALVIN ARMSTRONG, the Vender of LANE'S ENDLESS CHAIN HORSE POWER THRESHING MACHINE, is now in Baltimore, and will attend to selling this valuable Machine, either in single Machine, or by districts. Enquire at the American Farmer Office, No. 16 Calvert-street.
September 9.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	bushel.	$—	$0 40
BACON, hams,	pound.	11	—
Shoulders,	"	—	9
Middlings,	"	—	10
BUTTER, printed, in lbs. & half lbs.	"	31	—
Roll,	"	12	20
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	4 00	7 00
COWS, new milch,	"	15 00	27 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 62	1 75
CHOP RYE,	"	1 50	1 56
EGGS,	dozen.	9	—
FISH, Shad, trimmed		—	—
" salted,	barrel.	6 37	—
Herrings, salted, No. 1 & 2,	"	4 00	4 25
Mackerel, No. 1, 2 & 3,	"	4 00	—
Cod, salted,	cwt.	2 25	2 50
LAMBS, alive,	each.	1 25	2 00
Slaughtered,	quart'r	31	50
LARD,	pound.	8	—
ONIONS,	bushel.	—	73
POULTRY, Fowls,	dozen.	—	—
Chickens,	"	1 75	2 00
Ducks,	"	—	2 50
POTATOES, Irish,	bushel.	—	80
Sweet,	peck.	31	—
VEAL, fore quarters,	pound.	7	—
Hind do.	"	8	—

ADVERTISEMENTS.

A RARE CHANCE.

THE subscriber has the selling of the following Stock, at prices lower than of any similar stock he has ever known offered in this country. These animals will be for private sale, at the annexed prices, until Saturday, the 25th day of October, (the day after the termination of the Baltimore races), when all that may remain unsold will be offered at public auction. It is probable that many other animals will be added to the sale, of which due notice will be given. The subscriber has recently inspected every individual comprised in the following list, and therefore pledges himself that they will be found to answer the description here given. They are numbered, for convenient reference. Gentlemen wishing to improve their stock are not likely to have frequently such opportunities for doing it as the one now offered them.

Thorough-bred Durham Short-Horns.

No. 1—A Bull, about 18 months old, dun and white, of good size, and very handsome. This is a valuable animal. Price $200.

No. 2—A Heifer, about 18 months old, red and white, of good size, and very handsome She is in calf to a thorough-bred bull. Price $150.

No. 3—A Heifer, of same age and description in *all* respects as No. 2, and same price. She is a great beauty.

Calves.

No. 4—A white Bull.
5—A dun and white do.
6—A red and white do.
7—A red and white Heifer.
8—A white Heifer.

These are all calves of 1834, of the same stock as the above described, and equally promising. Prices from $80 to $120 each.—Each of the above animals will be sold with a well authenticated pedigree of pure blood.

No 9—A Heifer Calf, red and white.
10 do. do. do.

These two calves are of the same stock as those previously described, and equally handsome, but the pedigrees of their dams being lost, they will be sold without pedigrees, though they are *known* to be thorough-bred. Price $50 each.

No. 11—A thorough-bred bull, about 15 months old, red and white, of good size and form—a very valuable animal. He was bred by a gentleman of Philadelphia, who has imported a few thorough-bred cattle for his own use, but as he does not deal in them, he keeps no written pedigrees of his stock. His certificate, however, which will accompany the bull, is a sufficient guarantee of the purity of his blood. The brother of this bull, 3 years old, was sold this summer by John Barney, Esq. for $300. This will be sold for $200.

Alloyed Durham Short-Horns.

The following, though not thorough-bred, are (several of them) very fine animals.

No. 12—A three-fourths blood Bull, nearly white, two years old in May last—very large—was got by Hector, a thorough-bred bull, raised by Mr. Powell, out of a fine half-blood cow. Price $100.

No. 13—A seven-eighths blood Bull, red and white, two years old in July last, of middling size, and very handsome—got by the celebrated thorough bred bull Bolivar, out of a three-fourths blood cow. Price $100.

No. 14—A three-fourths blood Bull, red and white, one year old—got by Bolivar, out of a half-blood cow. Price $75.

No. 15—A fifteen-sixteenths Bull Calf, five months old, white and red—got by Apollo, (thorough-bred) out of a seven-eighths blood cow. He is a calf of extraordinary beauty, and great promise. Price $75.

No. 16—A seven-eighths Cow, (the dam of No. 15), a fine breeder, for which alone she has been kept. She is 10 years old, in good health and condition, and is supposed to be in calf by No. 12 or 13. Price $50.

No. 17—A three-fourths blood Heifer, 3 years old, white—got by Bolivar, out of a half-blood cow. She is small, but very handsome. She has had one calf, and has proved herself a fair milker, and is in calf now to No. 12 or 13. Price $75.

Sheep.

No. 18—A Buck, of the New Leicester or Improved Bakewell breed, two years old—a good animal. Price $50.

No. 19—A Buck, of the Cotswold breed, two years old; a valuable breeder. Price $50.

No. 20—A Buck of last spring; pure Improved Bakewell breed—very large and likely. Price $50.

No. 21—Twenty Bakewell Ewes, of pure blood, but having been kept not quite in Barney's style, are not first rate, except in blood. They will be sold for $20 to $25 each.

Boar.

No. 22—A fine Boar, 7 months old, a cross between the two celebrated breeds known as the Mackay and the large spotted Woburn or Duke of Bedford breed. He is a remarkably fine hog, and will be sold for $20, not less.

Fillies.

No. 23—A pair of very beautiful sorrel Fillies, one year old, remarkably well matched, thorough bred—pedigrees and prices shall be furnished on request.

Address I. I. HITCHCOCK,
American Farmer Establishment,
Who has for sale Devon Cattle of pure blood, at very low prices. Sept. 16.

100 Bushels of PEACH STONES WANTED, or any less quantity, for which a fair price will be paid at this Establishment. Sep 16.

WANTED,

AT the American Farmer Establishment, ORCHARD GRASS SEED, for which the highest price will be paid; also, CLOVER SEED and TIMOTHY SEED will be either bought or sold on commission, by
Sept. 16. I. I HITCHCOCK.

FINE GEESE.

FOR sale at this establishment, a GANDER and two GEESE of extraordinary size. They are believed to be a cross of the large Bremen goose upon the grey goose. Their color is grey and white. The person from whom they were procured, assured us that individuals of this breed, have been fattened to weigh as high as 25 pounds. Price $5 for the three. Sept. 16.

NEWFOUNDLAND PUPPIES.

SEVERAL fine DOG PUPPIES of this variety, the produce of a very valuable pair, recently procured from Philadelphia—may be had at $10 each, on application to I. I. HITCHCOCK,
Sept. 16. American Farmer Establishment.

PIGS OF THE BARNITZ BREED.

ABOUT the 25th inst. I shall be ready to deliver a few of these celebrated pigs at $5 each. Those whose orders are on register will have preference, but it is probable that after supplying them, a few will remain for sale. I. I. HITCHCOCK,
Sept. 16. American Farmer Establishment.